



# Information Technology Cost Estimation and Investment Management

11/9/2006

# Case Study: Internal Revenue Service

11/9/2006

- ❖ IRS is an IT-centric civilian bureau within the Federal government
- ❖ IRS has aggressive plans to modernize systems, some of which are >30 years old with replacement investments >\$1B
- ❖ Managing investments against the triple constraint is very difficult:
  - Annual tax year and legislative changes threaten scope
  - Federal budget uncertainty and 3 year implementation cycle impact baselined cost and schedule
  - Influences quality and expected delivery of functionality
- ❖ Cost Estimates came at a high price.

# Modernized Electronic Filing (MeF) Investment

11/9/2006

- ❖ The MeF investment provides electronic filing of tax and information returns over the Internet using standardized (XML) technologies
- ❖ New tax forms are implemented on the MeF Platform each year
- ❖ Implementation cycle for each form is (generally) 3 years
- ❖ Cost impacts were derived from Contractor Cost Estimates (CCEs)
  - Increased the cost to investment as none of the CCEs were free to the government.

# Challenges Affecting MeF Costs

11/9/2006

## ❖ Tax Law and Legislative Changes

- Legislative or administrative mandates for electronic filing increases scope and demand
- Changes to tax forms or processes
- Legislative inquiries that required cost, schedule, and scope responses within a little as 3 days

## ❖ Budget Cuts or Modifications

- Foreign conflicts and DHS initiatives threaten civilian budgets
- Budget variability or constant fluctuations in spending
- OMB Passback (budget response) requires re-baselining and immediate response from the investment

## ❖ Scope Creep from External Influencers

- Desire to change scope based upon industry or tax law compliance initiatives
- “Hot ticket” items, i.e., highly visible compliance issues
- Investment had very little intelligence or information to refute industry partners.

# Impacts to MeF Investment

11/9/2006

- 1. Each inquiry or influencer required new cost estimates**
  - ❖ Government did not have the tools or internal knowledge to perform software cost estimates
- 2. Each cost estimate required about one month to obtain a cost impact from contractors**
  - ❖ MeF Investment rarely had the information necessary to demonstrate the cost impact of legislative decisions
- 3. Very limited ability to conduct “what-if” scenarios to determine scope changes based upon the budget realities**
  - ❖ This imposed an “all or nothing” approach to delivery
- 4. Each exercise increased the overall cost to the investment**
  - ❖ CCE impacts were not included within the original budget and baseline

# Solution: MeF Value Impact Model (VIM)

11/9/2006

- ❖ **VIM is a software and implementation cost estimation tool**
- ❖ **Enables IRS to conduct at-will analyses to determine cost and benefit impacts to the MeF investment**  
**Utilizes historical, parametric, and Delphi cost estimation techniques**
  - **Enables analyst to define scope, implementation year, and release lifecycles**
  - **Scope consists of tax forms, schedules, and attachments, business rules, and features to be implemented within a given year**
  - **Estimates infrastructure impacts, development support, government personnel, and future O&M needs**
  - **Aligns benefits with scope and conducts a cost-benefit, net present value, ROI, and payback period for each “what-if” scenario**
- ❖ **Allows MeF Investment to quickly respond to inquiries, support budget formulation, re-baseline, and compare various release schedules from a cost and benefit perspective.**

# VIM Capabilities and Features

11/9/2006

**Scenario Information**

Name: MeF Scenario XYZ  
 Description: Delivers Individual, Corporate, Partnership, and Fiduciary Returns  
 Budget Year: 2008  
 Discounted Costs: ###,###,###.00  
 Discounted Benefits: ###,###,###.00  
 Payback Period: ## Years  
 Net Present Value: ###,###,###.00  
 Return on Investment: ###,###,###.00

**Summary** | Costs | Benefits

Show Details

Category	Activity	Milestone 2/3	Milestor
Development	Application	\$ ###,###,###	\$ ###,###
	<b>Subtotal</b>	<b>\$ ###,###,###</b>	<b>\$ ###,###</b>
Development Support	PM Tech Support	\$ ###,###,###	\$ ###,###
	Transitions Costs	\$ ###,###,###	\$ ###,###
	Total Net CRs	\$ ###,###,###	\$ ###,###
	ST&E Contractors	\$ ###,###,###	\$ ###,###
	SAT Contractors (TRDB & Application)	\$ ###,###,###	\$ ###,###
	Proposal Costs PRIME	\$ ###,###,###	\$ ###,###
	GSA – (TRDB)	\$ ###,###,###	\$ ###,###
	Facilities	\$ ###,###,###	\$ ###,###
	EO Web Hosting	\$ ###,###,###	\$ ###,###
	<b>Subtotal</b>	<b>\$ ###,###,###</b>	<b>\$ ###,###</b>
Infrastructure Costs	Prime Integration – Large	\$ ###,###,###	\$ ###,###
	Web Hosting – Large	\$ ###,###,###	\$ ###,###
	DITE – Large	\$ ###,###,###	\$ ###,###
	Hardware-Large	\$ ###,###,###	\$ ###,###

**Annualized Costs & Benefits**

	2000	2001	2002	2003	2004	2005	2006	2007
<b>Cost</b>								
BSM								
Other								
<b>Benefits</b>								

Real time financial analysis

Drill down capabilities

Future System Engineering Module will be added to refine infrastructure impacts

Benefits Module will be added to conduct Real Time Reporting for operational system

Ability to refine formulas and expressions

Ability to change parameters inside each scenario

Reporting at various levels to conduct budget formulation

**Chevo**  
Consulting



Change  
& evolve

# Q & A

11/9/2006

# About Chevo...

11/9/2006

- ❖ **Chevo Consulting (*Chevo*) is a management and information technology consulting organization based in Rockville, Maryland. *Chevo* helps our clients “*Change*” and “*evolve*” to meet the challenge of achieving operational excellence, and transform their organizations through the development and implementation of strategies, processes, and technologies that meet their objectives, fulfill their agency mission, and support government-wide initiatives and objectives.**
- ❖ **One of *Chevo*’s focus areas is Capital Planning and Investment Control (CPIC) and IT Investment Portfolio Management. We provide consulting services to our clients ranging from preparing OMB Exhibit 300 business cases, to the development, implementation, and ongoing support of agency-wide PfM and Project Management processes.**
- ❖ **Our CPIC/portfolio management clients include the Internal Revenue Service, National Archives and Records Administration, Securities and Exchange Commission, and Department of Labor.**

# Chevo Corporate Information

11/9/2006

## ❖ Chevo Corporate Headquarters:

1803 Research Boulevard, Suite 103  
Rockville, MD 20850  
Phone: 301-309-0040  
[www.ChevoConsulting.com](http://www.ChevoConsulting.com)

## ❖ Contact Information:

Stacey Godlove, Director, PMP  
Phone: 301-309-0040 x224  
Mobile: 240-285-6324  
[sgodlove@chevoconsulting.com](mailto:sgodlove@chevoconsulting.com)

Phil Sahady, President, PMP  
Phone: 301-309-0040 x230  
Mobile: 240-353-4773  
[psahady@chevoconsulting.com](mailto:psahady@chevoconsulting.com)